

Abstract

A method for monitoring the health of a system comprises performing at each of a plurality of times the steps of:

- 5 constructing a condition signature from a plurality of
condition indicators including (a) a plurality of vibration
measurements acquired from the system or (b) one or more
vibration measurements and one or more performance
parameter measurements acquired from the system;
- 10 predicting a normal signature from a model defining
one or more inter-dependencies between said condition
indicators, the normal signature corresponding to the
condition signature for a healthy system;
- 15 comparing the condition signature with the normal
signature; and
- registering an event if the condition signature
differs from the normal signature by more than a
predetermined threshold.